

WHAT IS CLAIMED IS:

1. A printer suitable for use in conjunction with a server operable to output rendered data representing an image to the printer via a network, the printer comprising:

5 a storage medium operable to store identification data associated with the printer;

a controller operable to

send the identification data to the server,

receive decoding data and the rendered data from the server, and

10 generate decoded data by decoding the rendered data by using the decoding data; and

a printer mechanism operable to print the image based on the decoded data.

2. The printer of claim 1, wherein the rendered data includes bit image data.

3. The printer of claim 1, wherein

the printer is coupled to the server via a network device;

15 a first IP address is assigned to the network device;

a second IP address different from the first IP address is assigned to the printer; and

the rendered data has the second IP address in a header portion thereof.

4. The printer of claim 1, wherein

20 the printer is coupled to the server via a network device;

a first IP address is assigned to the network device;

a sub IP address is assigned to the printer by the network device; and

the rendered data has the first IP address and the sub IP address in a header portion thereof.

25 5. The printer of claim 1, wherein the controller is operable to send a request for an activate code to the server, receive and store the activate code from the server, and send the activate code to the server when the server requests the printer to send the activate code for authentication.

6. The printer of claim 1, further comprising:

an input unit operable to send user data unique to a user to the server for authentication in response to a request for the user data from the server.

7. The printer of claim 6, wherein the controller is further operable to receive encoding data from the server, generate encoded data by encoding the user data, and send the encoded data to the server for authentication.

8. The printer of claim 7, wherein the user data represents a fingerprint of the user, and the input unit includes a fingerprint scanner.

9. The printer of claim 7, wherein the user data represents credit card information of the user, and the input unit includes a card reader.

10. A printer suitable for use in conjunction with a server operable to output rendered data representing an image via a network, the printer comprising:

means for storing identification data associated with the printer;

means for sending the identification data to the server;

means for receiving decoding data and the rendered data from the server;

means for generating decoded data by decoding the rendered data by using the decoding data; and

means for printing the image based on the decoded data.

11. A method for printing an image by a printer based on rendered data received from a server operable to output the rendered data representing the image to the printer, the method comprising:

retrieving identification data associated with the printer;

sending the identification data from the printer to the server;

receiving decoding data and the rendered data from the server;

generating decoded data by decoding the rendered data by using the decoding data; and

printing the image based on the decoded data.

12. The method of claim 11, wherein the rendered data includes bit image data.

13. The method of claim 11, wherein

the printer is coupled to the server via a network device;

a first IP address is assigned to the network device;

a second IP address different from the first IP address is assigned to the printer;
and

the rendered data has the second IP address in a header portion thereof.

14. The method of claim 11, wherein
5 the printer is coupled to the server via a network device;
a first IP address is assigned to the network device;
a sub IP address is assigned to the printer by the network device; and
the rendered data has the first IP address and the sub IP address in a header
portion thereof.

10 15. The method of claim 11, further comprising:
sending a request for an activate code to the server;
receiving and storing the activate code from the server; and
sending the activate code to the server when the server requests the printer to
send the activate code for authentication.

15 16. The method of claim 11, further comprising:
sending user data unique to a user to the server for authentication in response to
a request for the user data from the server.

17. The method of claim 16, further comprising:
receiving encoding data from the server,
20 generating encoded data by encoding the user data, and
sending the encoded data to the server for authentication.

18. The method of claim 17, wherein the user data represents a fingerprint of
the user.

25 19. The method of claim 17, wherein the user data represents credit card
information of the user.

20. A computer program product for printing an image by a printer based on
rendered data received from a server operable to output the rendered data representing
the image, comprising:

a computer readable medium; and
30 computer readable code stored in the computer readable medium for causing a
computer to:

store identification data associated with the printer,
send the identification data to the server,
receive decoding data and the rendered data from the server,
generate decoded data by decoding the rendered data by using the decoding
5 data, and
print the image based on the decoded data.

21. A server suitable for use in conjunction with a printer operable to print rendered data representing an image, comprising:

a printer driver operable to generate the rendered data; and
10 a controller operable to
receive identification data associated with the printer from the printer,
authenticate the printer based on the identification data,
send decoding data suitable for use by the printer to decode the rendered
data, and
15 send the rendered data to the printer.

22. The server of claim 21, wherein the rendered data includes bit image data.

23. The server of claim 21, wherein the controller is further operable to
receive a request for an activate code from the printer,
20 send the activate code to the printer in response to the authentication of the printer, and
send a request for the activate code to the printer when the server needs the activate code for authentication.

24. A server suitable for use in conjunction with a printer operable to print rendered data representing an image, comprising:

means for generating the rendered data;
means for receiving identification data associated with the printer from the printer;
means for authenticating the printer based on the identification data;
30 means for sending decoding data suitable for use by the printer to decode the rendered data; and

means for sending the rendered data to the printer.

25. A method for communicating with a printer operable to print rendered data representing an image, comprising:

generating the rendered data;

5 receiving identification data associated with the printer from the printer;

authenticating the printer based on the identification data;

sending decoding data suitable for use by the printer to decode the rendered data; and

sending the rendered data to the printer.

10 26. The method of claim 25, wherein the rendered data includes bit image data.

27. The method of claim 25, further comprising:

receiving a request for an activate code from the printer;

15 sending the activate code to the printer in response to the authentication of the printer; and

sending a request for the activate code to the printer when the server needs the activate code for authentication.

28. A computer program product for communicating with a printer operable to print rendered data representing an image, comprising:

20 a computer readable medium; and

computer readable code stored in the computer readable medium for causing a computer to:

generate the rendered data;

receive identification data associated with the printer from the printer;

25 authenticate the printer based on the identification data;

send decoding data suitable for use by the printer to decode the rendered data; and

send the rendered data to the printer.

30 29. A printer suitable for use in conjunction with a server operable to output rendered data representing an image to the printer via a network, the printer comprising:

a storage medium operable to store identification data associated with the printer;

an input unit operable to send user data unique to a user to the server for authentication in response to a request for the user data from the server;

5 a controller operable to

send the identification data to the server,

receive decoding data and the rendered data from the server,

generate decoded data by decoding the rendered data by using the decoding data,

10 send a request for an activate code to the server,

receive and store the activate code from the server,

send the activate code to the server when the server requests the printer to send the activate code for authentication,

receive encoding data from the server,

15 generate encoded data by encoding the user data, and

send the encoded data to the server for authentication; and

a printer mechanism operable to print the image based on the decoded data,

wherein

the rendered data includes bit image data,

20 the printer is coupled to the server via a network device,

a first IP address is assigned to the network device,

a sub IP address is assigned to the printer by the network device, and

the rendered data has the first IP address and the sub IP address in a header portion thereof.